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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,836	05/30/2001	Eliyahou Harari	11587 M-10187-43C US	6307

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EXAMINER

TRAN, ANDREW Q

ART UNIT	PAPER NUMBER
2824	

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/867,836

Applicant(s)
ELIYAHOU HARARI et al.

Examiner
Andrew Q. Tran

Art Unit
2824



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 9, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 63-100 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 63-100 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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Applicant's election with traverse of Group III invention, corresponding to claims 81-82, 84, 86-90 and 93, drawn to a method for programming and program verifying two-level memory cells, in Paper No. 6, is acknowledged. However the traversal is moot in view of the vacationing of the Restriction Requirement mailed September 10, 2001 (Paper No. 4) and the new Restriction Requirement set forth below, necessitated by the Supplemental Preliminary Amendment filed on October 09, 2001 (Paper No. 6).

Claims 1-62 been canceled.

Claims 95-100 been added.

Claims 63-100 pending.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 63-75 and 77-78, drawn to a non-volatile memory system for programming and program verifying multi-level memory cells, classified in class 365, subclass 185.03.

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- II. Claims 76 and 79-80, drawn to a non-volatile memory system for programming and program verifying two-level memory cells, classified in class 365, subclass 185.22.
- III. Claims 81-82, 84, 86-90, 91/81, 91/82, 91/84, 91/86 to 91/90, 92/84, 93/81, 93/82, 93/84, 94/81, 95, 96/81, 96/82, 97/96/81, 97/96/82, 98/96/81, 98/96/82, 99/96/81, 99/96/82, 100/81 and 100/82, drawn to a method for programming and program verifying two-level memory cells, classified in class 365, subclass 185.24.
- IV. Claims 83, 85, 91/83, 91/85, 92/85, 94/83, 94/85, 96/83, 97/96/83, 98/96/83, 99/96/83 and 100/83, drawn to a method for programming and program verifying multi-level memory cells, classified in class 365, subclass 185.11.

The inventions are distinct, each from the other because:

Inventions of Group I and Group IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be

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used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the method for programming and program verifying multi-level memory cells of the invention of Group IV, as claimed, can be practiced with another materially different product, such as other multi-level memory cell system known in the art, other than the multi-level non-volatile memory system of the invention of Group I.

Inventions of Group II and Group III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the method for programming and program verifying two-level memory cells of the invention of Group III, as claimed, can be practiced with another materially different product, such as other two-level memory cell system known in the art, other than the two-level non-volatile memory system of the invention of Group II.

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The Group I invention is distinct from that of Group II because Group I recites a multi-level memory cell system; while Group II claims a two-level memory cell system.

On the other hand, the Group III invention is distinct from that of Group IV because Group III draws to a method for programming and program verifying two-level memory cells; while Group IV directs to a method for programming and program verifying multi-level memory cells.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

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named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Papers related to this application may be submitted to Technology Center 2800, Group 2810 by facsimile transmission. Papers should be faxed to Group 2810 via the Fax Center. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (October 19, 1988). The Fax Center number is (703) 308-7722 or (703) 308-7724.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Q. Tran whose telephone number is (703) 305-3495.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Andrew Q. Tran
May 16, 2003



ANDREW Q. TRAN
PRIMARY EXAMINER